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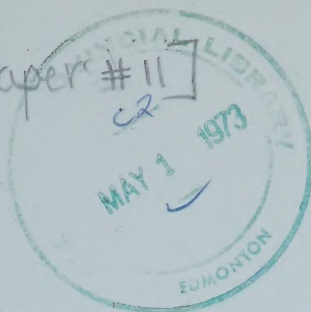
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Position Paper No. 11

Rural Gas Policy For Albertans

April, 1973

Alberta

Dept of TELEPHONES AND UTILITIES
Hon. Roy Farran
Minister

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RURAL GAS - POSITION PAPER

DEPARTMENT OF TELEPHONES & UTILITIES

APRIL, 1973

RURAL GAS POSITION PAPER

Summary of Main Recommendations

1. That every effort should be made to reach with natural gas as many as possible of the one-fifth of Albertans who do not at present enjoy the same benefits from this clean, cheap and convenient fuel as do other Albertans. This will not only bring greater equality in living standards between all Albertans who own our natural resources, but will facilitate diversification of the rural economy and strengthening of the family farm.
2. That the Province of Alberta assist from general revenues, a maximum of \$1300 per farm consumer for those whose per customer costs are between \$1700 and \$3000. The farmer would be solely responsible for his costs up to \$1700. This contribution would in effect equalize to some extent the opportunity for natural gas which is no longer possible through equalization of town and country gas rates.
3. This recommendation assumes that it is viable for a rural consumer to convert from propane at 14¢ a gallon to gas at 50¢ per mcf or less for a per consumer capital cost of \$1700. This per consumer cost of \$1700 can in all, or in part, be financed direct to farmers by loans of 85% over 15 years through the Co-op Activities Branch of the Department of Agriculture. It can also be contributed by private utility companies as part of a capital rate base on which they can make an approved rate of return through the gas rates.

4. That three-tenths of the provincial assistance be termed by-pass grants and be recoverable from those who join later but decline service in the beginning. Of this sum, one-third would be retained by the co-operative as an incentive to in-fill.
5. That when a gas franchise holder extends his service area to serve more customers, the new customer be required to pay one-sixth of the required extra per consumer sum as an incentive to the co-operative to extend its service.
6. That a government gas broker buy and sell gas at a reasonable price to rural gas distributors.
7. That franchise boundaries be allotted according to the criteria (a) of a financial per consumer investment limit of \$3,000 if 80 percent of potential consumers are served, (b) of municipal boundaries and (c) of natural obstacles.
8. That a service area within a franchise boundary may be allowed to commence distributing gas if it can be demonstrated that:
- (a) insufficient customers outside the service area have agreed to accept gas, and
 - (b) at least 66 2/3 percent of the widest service area possible have agreed to accept gas, and
 - (c) documentary refusals to accept gas have been produced from the balance of non-subscribers in both (a) and (b).
9. That a subsidy of 40 percent of the cost of the tank to a maximum of \$250 be paid to propane and fuel oil users who are located beyond the limit to which gas can be delivered at a per consumer cost of \$3,000.
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390
130
260



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10. That annual grants of \$15,000 each be made on a county basis to cover the costs of expert advice in the area of design, standards, inspection and billing where substantial gas distribution systems are operating.

This grant is aimed at covering the salary and expenses of a utilities co-ordinator who would also assist in rural electrification matters, in all counties and municipal districts. Priority for employment would be stressed for rural Albertans with experience as propane dealers.

However, a county or municipal district could choose to use the grant for services offered by private utility companies on a fee-for-service basis.

RURAL GAS - POSITION PAPER

COMMITMENT

The Progressive Conservative Party of Alberta, in its paper "New Directions for Alberta, 1971", undertook "to expand the provision for natural gas to Alberta farms at reasonable cost".

This commitment was in accord with the general conclusion that the Alberta economy should be diversified and spread across the province; that it was in the public interest to improve the economic viability of smaller centres; and that the family farm should be preserved. All Albertans, including those in rural Alberta, deserve a fair share of the benefits enjoyed by the people of this province from their ownership of natural resources.

Towards this end, during 1972 the new government pursued its pre-election commitment with a task force study into the complex problems associated with rural gas and with research into the potentials of plastic and aluminum pipe, into alternative methods of financing, into the economic viability of natural gas systems versus competitive fuels such as propane and fuel oil, into designs and standards, and into organizational structures which would accomplish the objectives.

One large rural gas co-operative was allowed to proceed on an experimental basis in the Lac Ste. Anne-Barrhead-Parkland area in 1972. Many lessons were learned from experience in the field of this aggressive local initiative which resulted in the largest operating gas co-operative in the province.

PRESENT POSITION

Although 79% of Albertan households now enjoy service from natural gas, a further 21% remain to be served.

This unserved portion is estimated to include 40,000 family farms and up to 42,000 households in small towns, villages and hamlets. About 25% of the rural consumers have already been served with natural gas by the utility companies, by the 46 operating rural gas co-operatives or by individual taps from pipelines.

These rural Albertans who already enjoy the benefits of natural gas are mostly located close to pipelines or gas wells. It can be said that they were among the easiest to serve from an economical point of view.

Average per member capital investment in existing gas co-operatives is \$1,593 for those wholly owned by consumers and \$1,841 for those sponsored by utility or pipeline companies. The method of financing such per customer investment in the capital structure of the gas distribution system varies enormously and broadly depends upon the amount that is expected to be recovered through the rates charged for the gas itself.

Despite some difficulties with early gas co-operatives, there have been no major failures since they first began to distribute gas in 1964.

Average costs to the consumer are 53.2 cents per mcf or \$9.65 per month for utility companies, 50 cents per mcf or \$12.08 per month for gas co-operatives and 71.6 cents per mcf or \$13.00 per month for municipal utilities.

These differences are accounted for by variations from average consumption of 300 mcf per annum and variations in the amount of capital payment included in the gas rates. For farms, for example, they do not include all the servicing costs for capital investment in the system which, if translated into a price for each mcf of gas as if all were being paid for through gas sales, would amount to more than as much again. In other words, if all capital servicing charges were translated into gas prices, the effective average rates would be in the order of \$1.10 to \$1.30 per mcf of gas.

Gas co-operatives vary in size from two members to 614 members which, without the advent of the large 800 member Ste. Anne Co-operative in 1972, would give a median of around 93 members. In addition, numerous individual customers have been supplied by single taps into pipelines running through or close to their properties at an average installation cost of \$800.00 for the high pressure meter station plus the cost of plastic pipe at approximately \$1.00 per foot to the farmyard.

POSITION OF THE MAJOR UTILITIES

Most of the concentrated urban market in Alberta has already been served with natural gas by the private utility corporations or by municipal utilities.

These private utilities are limited to a fixed allowable rate of return on their own capital investment or real equity by the Public Utilities Board. There has been no opportunity for equalization of rates or cross-subsidization between town and country as has been possible for utilities with a broader rate base such as Alberta Government Telephones. Nor has much degree of equalization taken place through provincial

general revenues via low-interest loans or regulations as in the case of rural electrification associations.

So far as the rural market is concerned, the private utilities have therefore been confined to gas rates measured by cost-of-service for restricted rural franchise areas, each of which has been required to stand on its own feet. Fair rates of return on the high capital cost per consumer plus reasonable operating costs have therefore resulted in uncompetitive gas prices except in the areas easiest to serve. Despite these inhibitions built into the system, the private utilities have taken considerable financial risk to serve marginally economic rural areas with gas.

The major gas utilities have often entered the rural field in partnership with a farmer gas co-operative, but no one pretends that the scattered rural consumers present a lucrative market for franchise holders.

Since the private utilities by regulation can in effect only make a return on their actual capital investment, they have a constant desire to expand. But this inclination is frustrated if the gas rates necessary to recover their costs and obtain such a return are too high for the confined rural market to bear.

And natural gas, unlike electricity which only faced weak rural competition from home battery generators, meets credible competition from both propane and fuel oil for all purposes and from electricity for cooking.

The proposals in this paper will not present much opportunity for profit, even at controlled levels above a capital rate base, for either

private utilities or co-operatives.

But it is hoped that both types of distribution will recognize their responsibility to supply natural gas at the lowest possible price to rural customers.

The government's contemplated capital investment in the plan certainly displaces capital on which a private utility might have hoped to make a rate of return. But without such an investment from provincial general revenues, the target of reaching the most rural dwellers for the lowest possible price would not be met.

The government has the assurance of both the private utilities and the gas carriers that they will co-operate in the plan. It expects that both will go to great lengths to make their considerable forces in the utilities field available at minimum cost.

GAS CO-OPERATIVES

Wholly-owned farmer gas co-operatives face many of the same constraints as the private utilities. Recruitment of natural gas consumers to their system depends directly on the competitive price, including capital cost and gas price, as compared with propane.

The first natural gas co-operative came on stream in 1964, but 37 of the 46 now operating have developed since 1967. Sixteen have commenced operating in the past two years. A further 28 gas co-operatives have been incorporated since 1971, but are not yet in operation. Another eleven proposed co-operatives await incorporation.

In addition, more than 300 new applications for individual taps have been awaiting approval since May 1972.

FLEXIBILITY OF SYSTEMS

The proposals in this position paper are not solely aimed at rural gas co-operatives. The problem of bringing natural gas to the greatest number of rural Albertans is so great as to require the harnessing of all Alberta's resources in the field, including the considerable expertise of the private utility and pipeline companies. The recommendations contained herein apply to all rural gas distribution systems.

The problem is complex. Not everyone appreciates that the unit cost of transporting gas 20 miles in a 2-inch pipeline at a residential load factor is greater than the unit cost of transporting gas at a high load factor in a 36-inch pipeline all the way to Eastern Canada.

Even with the incentives now proposed by the government for delivery of natural gas, many farmers may still prefer to stay with propane so long as propane prices do not escalate.

The increased drilling activity in Alberta is a direct result of the government's drilling incentive plan. This, coupled with an additional projected increase due to industry's favourable acceptance of the government's new gas pricing policies, will create the necessary surplus required for further gas sales from Alberta. The substantial growth in pipeline networks required for removal of this surplus gas will provide the source of supply required by many areas within the rural gas policy.

The magnitude and scope of this project that will offer natural gas service to some 80,000 rural households requires the establishment of priorities that will ensure orderly development. Sources of supply

will be more readily available in certain areas as pipeline networks increase. The availability of gas supply is one of the key factors in determining the order in which rural gas systems will develop.

CORE OF THE POLICY

This paper outlines methods to bring natural gas to the bulk of rural consumers. Since cross-subsidization through the rates is no longer possible across the province, equalization has to be achieved through the general provincial revenues - either by way of grant or guaranteed loan or both. A limited degree of equalization, however, can still take place within larger rural franchise areas.

POINT OF ECONOMIC CONVERSION

It has been estimated that in terms of current monthly payments, most rural consumers who are presently paying an average propane price of 14 cents per gallon (including freight and tank) would be justified in converting to natural gas if his investment in the distribution system were less than \$1700 and his price of natural gas were around 50 cents per mcf. To express this total cost in terms of gas rates, since methods of financing may vary, the \$1700 plus the 50¢ per mcf gas rate is the equivalent of a gas rate of approximately \$1.10 to \$1.30 per mcf. This calculation has been based upon an average consumption of 300 mcf of natural gas or 2,580 gallons of propane per year, but variations from this average figure do not make a significant change in the assumption.

In other words, any system which can be built at a per customer cost of \$1700 or less can stand on its own feet on the basis of monthly payments already being made for propane. Propane prices, which vary

considerably around the province, are expected to rise at a more rapid rate than the prices for natural gas.

This position paper suggests that loans for this purpose be made available to wholly-owned co-operatives or utility-sponsored co-operatives or any other organization supplying natural gas to rural customers. These loans would be on the same basis as presently arranged through the Co-operative Activities and Credit Unions Branch of the Department of Agriculture except that it is recommended that the term be increased from 10 to 15 years.

These loans are usually guaranteed by the province to a chartered bank and secured by lien notes on land. The terms have been one percent over prime for 85% of the capital cost.

The logic of increasing the term is that underground utility systems do not depreciate at a rapid rate and are expected to have a service life of at least 15 to 20 years. Other buried utilities such as sewer and water lines are included in long term CMHC mortgages. Even local improvements in municipalities are usually financed through levies on the mill rate at terms of 15 years and are subject to much greater wear-and-tear. Certainly the collateral of a buried distribution system is an immobile chattel, but the notes are guaranteed by the province and are subject to liens on land. A 10-year term on a utility system seems overly restrictive.

CONSUMER CAPITAL COSTS ABOVE ECONOMIC CONVERSION

The target of this plan is to make natural gas available to all Albertans who can be reached by a distribution system costing up to \$3,000 per consumer.

The minimum level at which assistance would be offered is that which would reach all rural consumers where the per consumer cost of the proposed distribution system were an average of \$2200.

It is estimated that this target would bring the benefits of this clean, convenient fuel to a majority of the potential rural market.

The government will endeavour to encourage co-operatives to reach beyond the minimum \$2200 average per consumer cost in the first stage. The government is, therefore, prepared to assist by grant realistic efforts to reach the limits of a franchise boundary set at up to the \$3000 per consumer level in the first sales drive. In any case, it will expect that all systems will be designed to allow for adequate high pressure pipe to accommodate the greater number of customers. The difference between \$3000 per customer and \$1700 per customer initial cost would be covered by grants.

But if the horizon of the full franchise boundary cannot be reached, the department will permit a co-operative to commence operations on a retracted service area with boundaries restricted to no lower than the \$2200 per customer contour. Evidence showing reasons for failure to achieve the maximum will be required.

In any event, more than 66 2/3% of potential customers must be prepared to accept gas from the beginning of operations of the co-operative. |

As explained later in this paper, if a gas distribution system has been allowed to commence operations at a level less than its potential, subsequent stages would bring natural gas to a contour level of an

investment of \$3000 per consumer. These orderly stages would be achieved over a number of years. Beyond that point, it is expected that propane will continue to have a competitive advantage for an extended period.

For a franchised distribution system to bring natural gas to the maximum number of consumers beyond the \$1700 per customer level, assistance by grant will be required.

The following refers to financing up to the minimum target of an average investment of \$2200 per consumer. This package assistance without conditions attached is designed to cover the cost of extended high pressure lines in steel or aluminum before regulation down to a low pressure plastic pipe system takes place. Of course, many systems will not require steel or aluminum pipe intakes and may proceed direct from pipeline taps or wells by plastic pipe. But although \$350 per customer is designated for this purpose, it is not specifically earmarked for any particular part of a design pattern to reach the \$2200 per customer contour.

Experiments in the field with the recent Ste. Anne Co-operative hold great hope for aluminum in these high-pressure intakes. Initial cost of pipe is lower, flexibility of the pipe allows a cheaper method of burial and pressure limits appear to be high, giving the possibility of designing for bigger fields in the initial stages.

Notwithstanding our calculations that it is economical to convert for a per consumer cost of \$1700 or less, some rural dwellers may decline to avail themselves of gas service or to join a new co-operative in the beginning.

The cost of by-passing these holdings must necessarily cause an additional cost to the balance of the subscribers. Earlier, it had been thought that this problem could best be met by a revolving loan or sinking fund, perhaps similar to the rural electrification association method for handling the problem. Some had recommended that such a by-pass loan fund be financed by a surcharge of four to five cents per mcf on the consumer gas rates.

This paper now proposes that the financial discipline of \$1700 being regarded as an economic conversion level and \$2200 per customer as the minimum target is enough to justify an outright per customer incentive grant of \$150 per original subscriber. Together with the per customer grant of \$350 mentioned earlier to cover base costs of the system, this would then total a \$500 grant. The economic conversion level would thus be raised from the \$1700 individual responsibility to \$2200.

For example:

\$1700	(at 50¢ per mcf) (guaranteed loan at 1% over prime for 85% over 15 years)
350	grant (for steel, etc.)
<u>150</u>	by-pass incentive grant - 31.0 of 500.
\$2200	

Since it is obviously fair that those who cause extra cost by joining later should pay a penalty, part of this by-pass incentive grant would be recovered by a surcharge of \$150 plus annual interest at $8\frac{1}{2}\%$ to late subscribers.

Of this amount, one-third would be returned to the distribution system for original subscribers as a bonus to encourage recruitment or in-filling and two-thirds would be returned to the government to offset by-pass incentive grant costs.

If, in the initial stage, the co-operative is successful in recruiting a wider area of subscribers at the \$3000 per customer contour, the grant would be as follows:

- \$1700 - (guaranteed loan of 85% at 1% over prime for 15 years)
- 910 - grant (for steel, etc.)
- 390 - by-pass incentive grant* 21 - 24 25

*For late subscribers, surcharge of \$390 to be paid - \$130 to co-operative and \$260 to the government, plus interest.

ULTIMATE HORIZONS

It is proposed that franchise boundaries be set as wide as possible. This is to discourage small systems which may be economical for individual members, but deny the viability of larger systems to reach more consumers.

Franchise boundaries at present fall under several jurisdictions. When called service areas, another terminology, they are under the jurisdiction of the Energy Resources Conservation Board. When called franchise areas, they can be granted by the local authority with the approval of the Public Utilities Board.

It is proposed that the boundaries of such franchise areas only be determined after consultation with the Department of Telephones and Utilities.

The criteria suggested are the financial discipline of a contour representing the limit of serviceability for a system covering 80% of potential subscribers for natural gas at a per customer cost of \$3000; the boundaries of the local taxing authority as far as possible; and finally, the natural boundaries such as rivers and railroads that would inhibit extension of a system.

It is proposed that boundary disputes be adjudicated by the Public Utilities Board and that the franchised operator within an allotted area be given exclusive rights to supply natural gas. A condition would be acceptance by at least 66 2/3% of potential subscribers. His franchise would be reviewable every three years by the Public Utilities Board as are franchises awarded to cablevision companies by the CRTC. But raiding by other distributors would not be permitted within a franchised area.

SUBSEQUENT STAGES

It is proposed that extension of a gas distribution system from its initial core to the limits of its franchised boundary be encouraged in an orderly fashion. Of course, it would be preferable if the total franchised area were covered in the initial drive at the beginning of the operation. But if this is not achieved, expansion must be orderly.

After maximum service has been given to the minimum limit of the \$2200 per customer, (or whatever wider service boundary is achieved) permission may be sought from the Department of Telephones and Utilities for a second stage for, say, servicing a new group of consumers for whom the total capital cost may be \$2500 each.

Although the base per customer cost for earlier subscribers will not change since it has already been averaged, a premium will now be required to reach the second stage. This premium is \$2500 per new consumer cost less the former \$2200 per customer cost or \$300.

It is proposed that the new subscriber should be asked to pay something extra for his more difficult service. The government would,

therefore, pay \$800 by grant and an additional premium of \$50 would be payable by the consumer by way of bonus into the general revenue of the co-operative, thus making his individual contribution \$1750 in this example. This additional customer payment into the co-operative will be one-sixth of the extra grants paid by the government above \$500.

This is intended as an inducement for the existing subscribers to extend their horizons. Of course, those in this new area who had refused service at the time of the initial sales drive will still be required to pay a surcharge into the by-pass fund.

In similar fashion and by orderly stages, the franchise operator would be encouraged to reach out to his ultimate horizon of the \$3000 per customer boundary.

INDIVIDUAL TAPS AND SMALL SYSTEMS

There is an obligation on farm consumers to draw their electricity only from organized rural electrification units. The reason was to maintain the viability of integrated farmer-owned systems.

However, the same consideration has not been given to rural gas systems.

Individual taps have been allowed into gas pipelines crossing or running close to a farmer's land. In fact, the practice has been encouraged, although prohibited in other provinces. Sometimes the arrangement has been part of the compensation given to the farmer for the right to enter his land with a pipe line.

These individual taps are probably not checked as meticulously for safety as more comprehensive systems. Yet regulators are needed, in

addition to meters, to bring pressures down to an acceptable consumer level.

Recognizing that further proliferation of such disorganized taps threatened the viability of future rural gas systems, since they were in the nature of "cream-skimming" without regard to one's neighbor, the government has discouraged any further hook-ups of this nature since May, 1972. However, more than 300 applications are now awaiting the policy of the government.

It is proposed in this paper that the policy in regard to individual taps shall be as follows:

(a) that the waiting applications now be approved provided that their gas is bought through the proposed government broker, to be known as Gas Alberta, explained elsewhere in this paper;

(b) that the price charged for such gas, when translated into cents per mcf, include a surcharge which represents the difference between the capital cost for his small system and the individual capital commitment for average farmers in a potential gas distribution system in the area;

(c) that the funds so accumulated carry interest which will be added to the gas rate at the individual tap and that they be held in trust for five years;

(d) in the event that a rural gas franchise area does not commence operation around the individual tap within five years, the surcharge as reflected in the gas rates above the average rate charged to co-operative customers be returned to the individual tap. If a rural gas franchise

area does commence, the funds so accumulated will be paid into the co-operative as part of the contribution of the holder of the individual tap. That consumer will then be a member of the new distribution system.

It is suggested that existing individual taps will not be required to purchase their gas through Gas Alberta unless they wish to do so. If they decline to join on the conditions of a new individual tap, they will therefore not be protected by the shield of Gas Alberta from the vagaries of the market.

There is an equal danger to the viability of larger gas distribution systems if a group of farmers within a possible franchise area calculate that they can form a small co-operative at a per customer cost of less than \$1700, the deemed reasonable conversion level. This would also be tantamount to "cream-skimming". The department proposes that it would recommend franchise boundaries at the up to \$3000 per customer contour as previously explained, and would only consider retraction of these boundaries if it could be demonstrated that a conscientious attempt to reach wider horizons had failed. Probably this would involve documentary evidence of refusal of service by more distant consumers.

In the event that a dispute arose within the boundaries of a suggested franchise area, the Department would have the power to test the opinions of the majority by mail plebiscite or referendum.

GAS ALBERTA

It is proposed that a small section be organized within the Department of Telephones and Utilities to be known as Gas Alberta.

Its function would be to negotiate the purchase of gas for rural systems at a reasonable wholesale price, to adjust, if necessary, for

any rebate due under the government's proposal to shield Alberta consumers from increases consequent upon obtaining a fair and reasonable return from buyers outside Alberta and to equalize rural gas prices to some degree throughout the province. It is proposed that the actual field work for Gas Alberta would be done by an appointed agent or agents who would normally be the operators of the pipeline from which gas was drawn.

These operators would also be responsible for the standards and maintenance of the high pressure system which might branch from the main pipeline and the regulating station, although capital construction costs and title would rest with the actual rural gas distributor or co-operative. Calculations for cost of such an intake would be included in the per customer cost for the purpose of viability contours previously explained.

If the operator of the pipeline declines to act as agent, another may be appointed.

There is logic in pressing responsibility for high pressure line standards upon the pipeline operator. In some instances in the province capped wells may form a more economical source of gas for rural systems than pipelines. In that case, the surplus may well be directed into the main pipeline upon agreement.

In fact, Alberta Gas Trunk Line will be encouraged to take any such wells into their systems, with the high pressure line becoming a cost of the carrier.

In any event, the safety factor in the high pressure line is more critical than in low pressure lines.

Gas Alberta, in effect, would be a broker or jobber for natural gas on behalf of the rural gas distributors. It would endeavour to compensate with equal gas elsewhere in their system some pipeline operators who might have justifiable high wellhead or transmission costs. It will urge that the rural gas demand, in the context of the whole market, is relatively small and does not represent a significant loss in terms of volume from the gas carried in the line.

REGULATION OF RATES

It is recommended that the end rates for rural gas distributed by wholly member-owned co-operatives be exempt from regulation by the Public Utilities Board except on appeal. This would place rural consumers in such systems in a similar position to those in municipal utilities.

However, it is the desire of the government to encourage the private utilities to participate in this huge plan to bring natural gas to rural subscribers. But their rates are subject to firm fixing at intervals by the Public Utilities Board according to allowable return on their own investment.

There is no reason why a private utility should not enter into partnership with a co-operative and qualify for grants under this plan. If the consumers decided to agree with the utility that it will invest all or part of the original \$1700 per customer cost and recover its allowable return on that investment through the gas rates, there would be no obstacle to such an arrangement in this plan. However, gas rates would then be subject to regulation by the Public Utilities Board. The distributors would be as much entitled to grants as wholly-owned farmer

farmer co-operatives. In fact, there may be considerable advantages in following this route.

SAFETY AND DESIGN STANDARDS

The Department of Telephones and Utilities will co-ordinate the setting of standards for design, safety, and records of plant for rural gas systems.

During 1972, the government has funded research into the pressure limits on plastic pipe. Any increase in the present permitted pressures will increase viability of rural systems from an economic point of view. Early reports from the consultants, who are expected to report finally before the end of May, are that pressures may be increased in polyethylene pipe from 50 psi to 60 psi, an increase of 20%. This may reduce capital costs by about 5%. There are possibilities that the allowable pressures may be raised even further.

There are also great hopes for low-cost aluminum pipe which is substantially less costly than steel at high operating pressures.

The government proposes that the jurisdiction for safety standards be widened further. At present, the Energy Resources Conservation Board has general jurisdiction for high pressure pipeline standards and ancillary low pressure main laterals. The Detection Branch of the Department of Manpower and Labour is responsible for safety of various low pressure laterals and farm connections. In-progress inspections are minimal due to shortage of staff.

It is proposed that a grant of up to \$15,000 per year be paid for each municipal district, county, improvement district and special area in which a substantial rural gas distribution system is operating. This

grant will not only fund the inspection of in-farm installations in the manner of urban local gas and plumbing inspectors, but will be designed to encourage rural local authorities to take an interest in the supply of natural gas to their electors. It is envisaged that the utilities officer engaged with such a grant will help in the organization of all utilities within his area. It is recalled here that ultimate authority for a franchise rests with local government.

The government will urge that such employment, in addition to other employment in gas distribution systems, be considered on a priority basis for people with propane experience. Obviously, an expansion in the use of natural gas in rural areas will have an economic effect on propane dealerships. And there is great similarity between in-farm distribution systems for natural gas and for propane.

The government would also like to remind local authorities that there is an alternative system of financing for such an important utility in addition to the loans, grants and gas rates already mentioned. Local benefit bylaws where special mill rates are assessed to those who enjoy a service are well understood at local government level. In the case of such special mill rate levies to those who receive a service such as fire protection areas, hail suppression, local improvements, etc., no lien is required on land other than that implicit in the Tax Recovery Act.

There would be no objection to local authorities using this grant to reward a private utility for the function on a fee-for-service basis.

The government proposes to fund "package services" in the area of advice, typical designs, construction methods, safety standards, etc.,

direct to the private utilities. These "gas distribution kits" will be given free-of-charge to gas co-operatives.

STREAMLINING PROCEDURES

Some delays were experienced in the Ste. Anne project during 1972 which resulted in much of the field construction taking place over the winter.

These delays were caused in part by Energy Resources Conservation Board procedures which call for wide advertising of proposed pipeline installations before permits can be issued. These regulations were designed for high pressure lines and for pipelines of a more substantial nature than the small diameter plastic which can be ploughed in to a depth of three feet.

The widespread advertising and formalized procedures encourage some landowners to think that ploughed-in plastic pipe constitutes a similar argument for right-of-entry compensation as for larger pipelines.

Yet farmers, if left to themselves, would negotiate easements on a handshake at a nominal sum. Certainly such easements would, of necessity, have to be attached to land titles for the purpose of subsequent land sales.

Absentee owners, particularly on small holdings, are sometimes difficult to find. And although the small gas pipeline would likely increase the value of their land, they might not understand the enthusiasm and desire of their farmer neighbors to proceed with dispatch in the interests of the community.

It is suggested that reasonable notice under the Pipe Line Act by double-registered mail to a registered owner should allow a rural gas

distributor to enter upon land to lay a plastic pipe line if no response has been received within 21 days. A condition upon the rural gas co-operative would be that it would adjust the alignment of the plastic pipe line to avoid the property if an objection is received at a later date and settlement cannot be agreed upon. Expropriation procedures could be used where necessary.

It is further suggested that rural gas co-operatives should be allowed entry upon all deeded land after proper notice, with compensation, if any, to be set later by the Surface Rights Board.

It must be an obligation upon gas co-operatives burying pipe that land disturbed by the plough be returned to its former state, that tracer wires are buried with the pipe, that accurate location records are kept and that markers are placed at fence lines and at road crossings.

The Farmer's Advocate in the Department of Agriculture will be asked to use his best endeavours to smooth these procedural obstacles for the gas co-operatives. It is expected that he will be able to assist in overcoming unreasonable delays in the issuance of permits.

PROGRESS PAYMENTS

It will be an objective of the department to liaise with the Co-operative Activities and Credit Unions Branch in the Department of Agriculture with a view to expediting progress payments from approved loans.

The department will also establish regulations where performance bonds must be posted by contractors and where all feasibility studies and designs require approval by the department before contracts are awarded.

SPECIAL GRANTS

In unusual circumstances where a community may be at such an excessive distance from a source of gas that a distribution system would not be viable even considering the financial assistance described elsewhere in this paper, the province will consider applications for special grants for lengthy high pressure lines.

COSTS TO PROVINCECapital Costs

Guaranteed loans	\$ 74,500,000
Grants to gas consumers	31,000,000
Grants to propane users (outside viable gas areas) @ \$250	1,250,000
Special high pressure grants	10,000,000
	\$116,750,000

Annual Costs

Gas Alberta & Utilities Branch	\$ 350,000
Grants to municipal utility offices	500,000
Rebates on gas	2,000,000
	\$2,850,000

PROPANE AND FUEL OIL USERS

Beyond economically viable gas franchise areas, it may not be possible to service certain rural dwellers for some time.

The immediate horizon has been set at an economically viable contour of \$3000 per customer cost.

If a farmer lives outside such a contour and outside adjoining areas where gas supply is feasible in the immediate future, the government will give a one-time capital grant of 40% of the cost of a propane or fuel oil tank up to a maximum of \$250.00. This is to give some equity to

propane and fuel oil users as compared with natural gas support, although it is recognized that many propane and fuel oil users will be paying less than the per customer cost at which a natural gas user would be supported by grant under this plan.

EXPANSION OF EXISTING CO-OPERATIVES

The provisions of this plan to deliver natural gas to the maximum number of rural consumers applies, insofar as expansion or infilling are concerned, to existing gas co-operatives or rural gas utilities. While it does not apply in a retroactive sense to existing co-operative members, it does seek to encourage expansion of their facilities to new subscribers on the same terms as new co-operatives.

HEAVY CONSTRUCTION

It is recommended that any consumer within a franchise area whose extraordinarily heavy demand for gas may cause the need for over-size pipe be required to pay a capital surcharge. This extra cost should take into account his possible beneficial effect upon the distributor from bulk consumption of the gas itself.

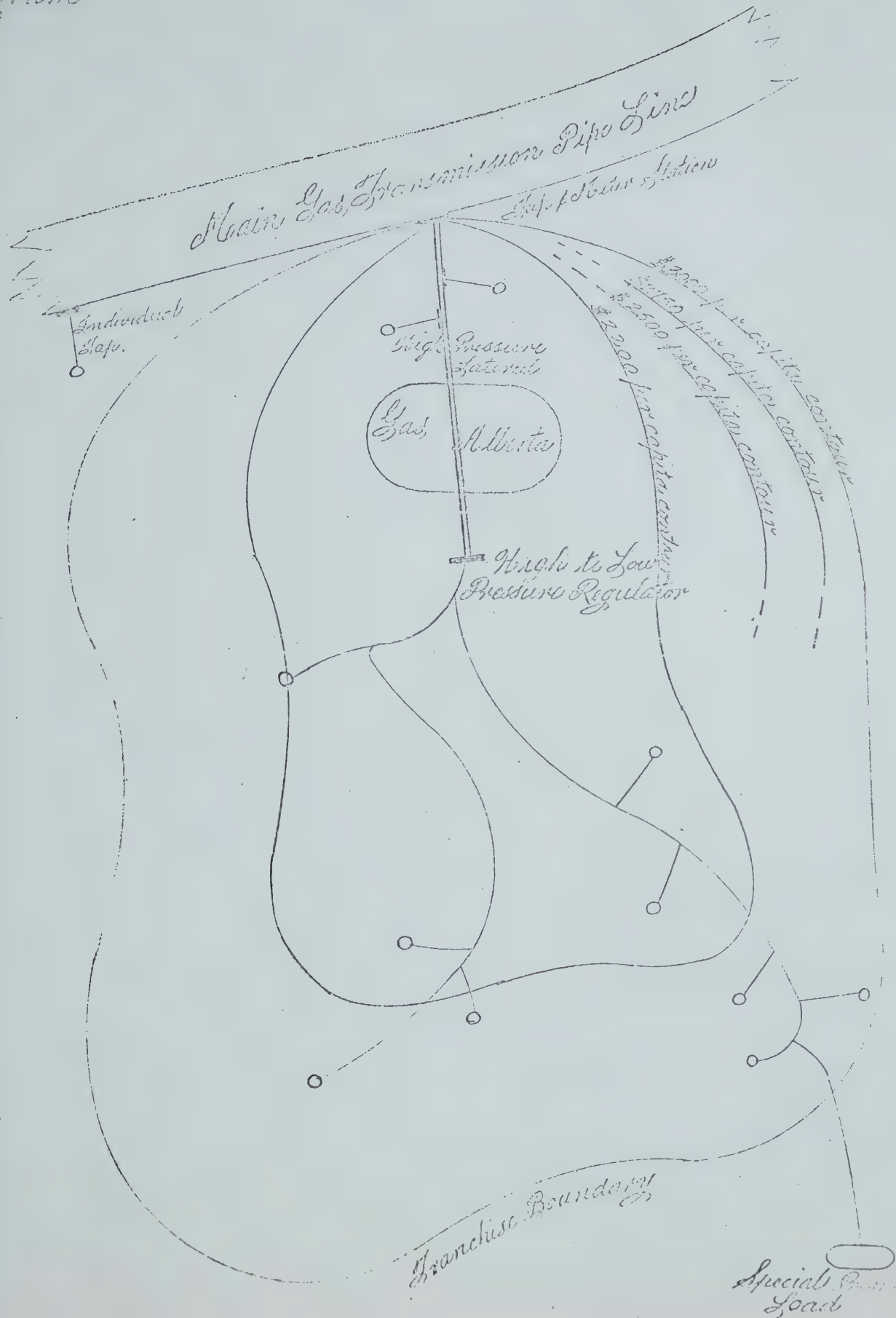
If a consumer outside a franchised area should require gas from the nearest source, he will be required to pay a premium for the extra capital cost of the special extension required.

ADMINISTRATOR

The Director of the Co-operative Activities Branch, after consultation with the Department of Telephones and Utilities, may appoint an administrator to take over operation of a franchised co-operative if it fails to operate successfully. This provision will be similar to that pertaining to rural electrification associations.

INFLATION

Dollar figures used in this paper for viability considerations are clearly subject to adjustment from time to time in accordance with the effect of inflationary pressures on the dollar and on construction costs.



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